Scope of work:

Name of work: Tender for the work of refurbishment of existing 1 MLD Sewage Treatment Plant (STP) using Membrane Bio-Reactor (MBR) Technology, including 2 years Operation and Maintenance, at J.P. Park, Matthikere, Bengaluru.

The Used Wastewater Treatment Plants (UWTPs) maintained by the BBMP Lake Department are proposed to be handed over to BWSSB. The Chief Commissioner of BBMP, vide reference CC/PR/239/2024-25 dated 31/12/2024, has directed the BWSSB Chairman to initiate the process of taking over all UWII's currently maintained by the BBMP Lake Department. As BWSSB operates several high-capacity wastewater treatment plants and has extensive expertise in their operation and maintenance (O&M), it is well-equipped to manage these facilities. Furthermore, many such UWTPs are expected to be developed and managed by BWSSB in the near future.

The Hon'ble Chairman has directed to initiate the process of taking over the UWTPs within its jurisdiction. In line with these directions, the 1 MLD UWTP at J.P. Park, Mathikere, which operates on Membrane Bioreactor (MBR) technology, has been taken over from the BBMP Lake Department.

J.P. Park (Jayaprakash Narayan Park) spans approximately 86 acres and serves as a significant green space within the city. Due to reduced groundwater levels and low yield in surrounding borewells, the UWTP was originally constructed to treat used water and supply treated water for irrigation of the park's vegetation. This plant plays a crucial role in ensuring a sustainable water source for the park's maintenance.

Presently, the plant is not in operating condition as most Electro-Mechancial equipment are stolen and or damaged. The nearby borewells have dried as Matthikere Lake is dried up. By rejuvenating the Matthikere Lake the groundwater table will improve and also recharge the borewells in the vicinity. Therefore, it is essential to refurbish the plant and put to operation. The plant effluent parameters must meet Honorable NGT Parameters.

In this regard a detailed estimate amounting to Rs.4,99,00,000/- (Rupees Four Crore Ninety Nine Thousand only) for refurbishment of the existing 1 MLD STP with Two Years Operation and Maintenance work to fill the treated water to Mathikere Lake. The estimate is prepared based on CSR 2023-24 and check quotations obtained from reputed manufacturers at present market rates.The following provisions have been made in the estimate.

1. Civil Works - Interlocking pavements, cleaning of water retaining structures, Painting and minor civil repairs, Plumbing works etc,.
2. Electrical - Planting lighting, LT Panel for power supply, PLC SCADA system, Power and control cables, 125 KVA DG
3. Mechanical - Supply of Raw Sewage Pumps, Air Blower, Diffusers, Air lines & Valves, Mixers, Rotary screen, RAS & WAS pump sets, Sludge Pump, Retrievable Membrane unit, Centrifuge, Electric Hoists, Alum dosing system
4. Two years Operation and Maintenance cost

(i) Bidder must tie-up with a Technology Provider for Membrane Bio-Reactor (MBR) Treatment Unit to achieve the guaranteed treated water parameters as mentioned in scope of work. MOU/Technology Tie-up Agreement on stamp paper of Rs. 500 (Rs. Five hundred) at the time of submission of bid.

(ii) Technology Provider shall have experience of providing MBR system in at least One (1) Plant of proposed capacity for sewage treatment in retrofit/new application during last five years for any State / Central Government organizations / ULBs. The said Plant must be in operation for at least 1 year. MBR should be equivalency standard of CA Title 22.

iii) The technology provider should have a registered office in India, with the trained manpower in process design, detailed engineering, commissioning and support during O&M period.

Power Cables and Cable Trays - The Power cable shall be supplied as per the existing rating and and shall be installed in new cable trays.

Testing and commissioning - The testing and commissioning shall be carried out as per the manufacturers recommendations, in coordination with engineers of operation and maintenance contractor.

The tenderer should compulsorily visit the plant and acquaint with scope of work before submission of the bids. The length of cable, cable tray and pipeline quantity is approximate. The tenderer should assess the actual length and extent of work required to complete the work in all respect for commissioning the equipments before submission of the bids.

For any further information, the tenderer may contract the office of the *Executive Engineer, Bangalore Water Supply and Sewerage Board, Waste Water Management, H & A Valley Division -1, Hebbal STP, Outer Ring Road Opp. to Nagavara Lake, Bangaluru 560 024.* during working hours.